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| APPLICATION NO.                                                       | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.        | CONFIRMATION NO. |
|-----------------------------------------------------------------------|-------------|----------------------|----------------------------|------------------|
| 10/549,297                                                            | 09/15/2005  | Isamu Takehara       | 0003-5566 (PCT)            | 3588             |
| 40627                                                                 | 7590        | 01/04/2007           |                            |                  |
| ADAMS & WILKS<br>17 BATTERY PLACE<br>SUITE 1231<br>NEW YORK, NY 10004 |             |                      | EXAMINER<br>NGUYEN, HANH N |                  |
|                                                                       |             |                      | ART UNIT<br>2834           | PAPER NUMBER     |
| SHORTENED STATUTORY PERIOD OF RESPONSE                                |             | MAIL DATE            | DELIVERY MODE              |                  |
| 3 MONTHS                                                              |             | 01/04/2007           | PAPER                      |                  |

Please find below and/or attached an Office communication concerning this application or proceeding.

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

|                              |                                      |                                        |  |
|------------------------------|--------------------------------------|----------------------------------------|--|
| <b>Office Action Summary</b> | <b>Application No.</b><br>10/549,297 | <b>Applicant(s)</b><br>TAKEHARA ET AL. |  |
|                              | <b>Examiner</b><br>Nguyen N. Hanh    | <b>Art Unit</b><br>2834                |  |

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 15 September 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |                                                                                                                                 |                                                                                         |
|---------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) *                                                   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                            | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) *<br>Paper No(s)/Mail Date <u>1205</u> . | 6) <input type="checkbox"/> Other: ____.                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

1. Claims 1, 2 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Goto et al. (US 6,552,456) in view of Tokunaga (US 6,674,200).

Regarding claim 1, Goto et al. disclose a motor (Figs. 4 and 5) provided with: a stator having cores and coils (37); a rotor (36) having a permanent magnet (38) arranged in a ring shape; and a fluid dynamic bearing which rotatably supports said rotor with respect to said stator, wherein said fluid dynamic bearing (Fig. 5) is provided with: a shaft body (31) fixed to said rotor; a shaft body support part (34), which has a closed end and is fixed to said stator, in which a shaft body insertion hole is formed for rotatably accommodating said shaft body; and a fluid (Fig. 5) which is filled into a clearance formed between said shaft body and said shaft body insertion hole, and said shaft body is provided with; a thrust shaft (33) part formed in a flange shape in an axial central part, and a radial shaft part (32) and a support part which are formed cylindrically on the opposite axial sides of said thrust shaft part, and said shaft body support part is provided with: a small diameter cylinder part which forms a closed end side of said shaft body insertion hole, and into which said radial shaft part is inserted such that it rotates freely (Fig. 5); a large diameter cylinder part which forms an open

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end side of said shaft body insertion hole, and into which said thrust shaft part is inserted such that it rotates freely; and a counter plate (35) which covers the open end of said shaft body insertion hole, and forms a capillary seal (Fig. 5) between itself and said support part, and there is provided a dynamic pressure generation unit comprising said fluid, and dynamic pressure generating grooves (G1, G2) formed in at least one of the outer faces of said thrust shaft part and said radial shaft part, and the inner face of said shaft body insertion hole facing these outer faces. Goto et al. fail to show the permanent magnet arranged in a ring shape on the radial inner side of said stator, facing said cores and coils.

However, Tokunaga discloses a spindle motor wherein the permanent magnet (12 in Fig. 1) arranged in a ring shape on the radial inner side of the stator, facing said cores (14) and coils (14a) for the purpose of reducing cost (Col. 2, lines 10-14).

Since Goto et al. and Tokunaga are in the same field of endeavor, the purpose disclosed by Tokunaga would have been recognized in the pertinent art of Goto et al.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Goto et al. by arranging a ring shape permanent magnet on the radial inner side of the stator, facing said cores and coils as taught by Tokunaga et al. for the purpose of reducing cost.

Regarding claim 2, Goto et al. disclose a motor a ratio of the outer diameter of said thrust shaft part, to the outer diameter of said permanent magnet is approximately 1 to 2.

Regarding claim 4, Goto et al. disclose in the prior art a recording medium drive device (1 in Fig. 1) provided with the motor and said rotor is provided with a fixing part (13) for attaching a sheet type recording medium.

2. Claim 3 is rejected under 35 U.S.C. 103(a) as being unpatentable over Goto et al. (US 6,552,456) in view of Tokunaga (US 6,674,200) and further in view of Sakamoto.

Regarding claim 3, Goto et al. and Tokunaga show all limitations of the claimed invention except showing a motor wherein said permanent magnet is only fixed on an axial direction surface of said magnet located on an opposite side to an outer peripheral surface facing said cores and said coils is open.

However, Sakamoto discloses a motor wherein said permanent magnet (1 in Fig. 1b) is only fixed on an axial direction surface of said rotor, and an peripheral surface of said permanent magnet located on an opposite side to an peripheral surface facing said cores and said coils is open for the purpose of reducing the size of the motor (Col. 2, lines 10-14).

Since Goto et al., Tokunaga and Sakamoto are in the same field of endeavor, the purpose disclosed by Sakamoto would have been recognized in the pertinent art of Goto et al. and Tokunaga.

It would have been obvious at the time the invention was made to a person having an ordinary skill in the art to modify Goto et al. and Tokunaga by providing a motor wherein said permanent magnet is only fixed on an axial direction surface of said magnet located on an opposite side to an outer peripheral surface facing said cores

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and said coils is open as taught by Sakamoto for the purpose of reducing the size of the motor.

**Conclusion**

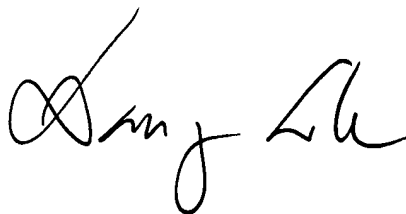
3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh N Nguyen whose telephone number is (571) 272-2031. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Darren Schuberg, can be reached on (571) 272-2044. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1782.

HNN

December 22, 2006



**DANGLE  
PRIMARY EXAMINER**